## Professor: Watch hazards of Gasohol production

By Kevin Field

Alcohol and its use as a fuel could pose several problems to users, according to a UNL agricultural engineering professor.

Many of the problems relate only to those producing ethanol for use as a fuel, but there are some problems and possible hazards users of Gasohol should be aware of, Prof. Rollin Schnieder said.

Problems are minimal for people using Gasohol in cars. he said, but the use of the alcohol-gasoline blended fuel in tractors and mowers could be dangerous.

"For the five-acre homeowner with a small tractor, gasohol could be a problem," Schnieder said.

The fuel tank on small tractors is often centrally located, and in a position where it can become overheated, he said. That can create an excessive build-up pressure and cause the fuel to splash out and ignite when the tank cap is removed.

He said there have been instances of fuel splashing out

when gasoline was used in the tractors with central tanks, and the problem could become worse if Gasohol is substituted.

More explosive

Schnieder said this is because alcohol is more exlosive than gasoline and will evaporate faster in an overheated situation. The same problem is also possible with smaller hand-pushed lawn mowers.

Proper fuel tank venting is necessary to avoid this hazard, Schnieder said.

People using Gasohol in their cars could experience some carburetion problems until they get their carburetor adjusted for the different fuel. They could also experience difficulty starting their cars in cold weather.

Schnieder says he has heard reports of easier starting during cold weather, but said the reports are probably incorrect.

The flash-point of ethanol is higher than that of gasoline which means that it takes a higher temperature to get the vapors necessary for ignition from alcohol than it does from gasoline.

More heat needed

Thus when the two fuels are mixed, the temperature needed for ignition is raised, he said.

Another potential but temporary problem is caused by the solvent ability of ethanol.

The alcohol in Gasohol will act to clean up corrosion and gum deposits that often build-up in gas tanks and tuel systems.

The freed deposits can then flow through the system

and possibly clog the fuel lines, Schnieder said. He added that filters located in the right places can solve the problem and after the tank is cleaned completely

the problem should disappear.

## Handicapped

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Lounge. Mark Doak, Sweep Left manager, said the first floor bar is completely accessible but a flight of stairs blocks

the second floor. "There have been handicapped people that have used the second floor," Doak said. "They just need someone to carry them up the stairs."

Some bars like the Starship Enterprise solve the problem of front stairs by allowing accessibility to wheelchairs through side or back doors.

McGuffey's has such a side entrance but the person in the wheelchair must wait while someone else goes in the front and asks that the side door be opened.

Kreishauser said this requirement is "something kind of degrading."

The Underground Restaurant and Bar has a back door and freight elevator that the handicapped may ride instead of tackling the stairs in front, assistant manager Paula Haas said. Restrooms also are accessible, she said.

Eleven bars checked had inaccessible restrooms by state law standards. They wre not wide enough to allow the entrance of a wheelchair and had no wide stalls with support railings or low sinks and mirrors.

Kreishauser said restrooms are places where people spend a lot of time. Most of the time, she said, owners just don't think about what is needed.

Barrymore's which has a fairly accessible entrance has restrooms up one steep flight of stairs. Barrymore's Manager Gary Mosier said he has several wheelchair customers.

"So apparently it is accessible to them," he said. Mosier said there was no way the bar could be expanded to allow new first-floor bathrooms.

The Zoo Bar has a similar problem, allowing accessible entrance but not bathrooms. Day Assistant Manager Ron Kallhoff said the customers that do come in in wheelchairs have never complained about the facilities. He said he doubted anything would be done to improve the bathrooms.

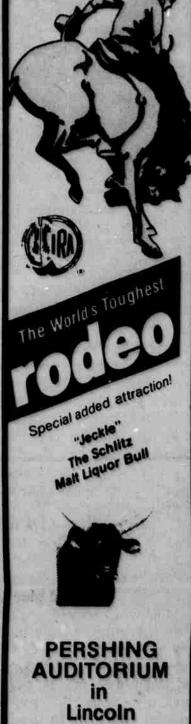
Other bars with inaccessible restrooms were Brannigan's, Godfather's, Cliff's, the Brass Rail, Duffy's, the Waterhole, Sandy's, O.G. Kelly's and Horsefeathers.

The state law also requires seating space be reserved for wheelchair customers in some area of the establishment. Seating in some bars, like the Waterhole and Horsefeathers, is not made for the wheelchair-bound. The split-

level bars have booths with built-in benches, most so high they require climbing onto.

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## Centers to help blood bank

the opening of two plasma-conecting dusinesses in Lincoln has not reduced the number of donors at the Community Blood Bank, the blood bank director of public relations said.

The two plasma centers, Lincoln Plasma Corporation at 2021 O St. and University Plasma Center at 1442 O St., pay donors for plasma donations. Plasma is the clear liquid component of the blood and contains no red or white blood cells. It is valuable because of the proteins it contains, and is used in treatment of hemophilia, a genetic disorder that prevents blood from clotting, and in other medical treatments.

Lincoln Plasma Corp. averages 400 donors a week and University Plasma Center averages 600 donors a week, the managers said.

Gloria Devoe of the Community Blood Bank which

collects whole blood for the Lincoln hospitals said the plasma businesses have not decreased the number of volunteer blood donors.

"Here (at the blood bank) people are more interested in saving lives than making money," Devoe said. The plasma businesses and the blood bank appeal

to different age people, she said. There are more college students at the plasma businesses because students need the money more. The blood bank has older donors, some of which are in their seventies.

"It has hurt us some when the mobile unit goes to the campus," Devoe said. But she thinks the plasma businesses will be beneficial to the blood bank in the long run because college graduates in Lincoln will be accustomed to donating and will give blood more often.



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